Master Data Management

Delivering Best Version of Truth
Over the past several decades, many organizations have built various operational systems in silos. This mindset is really an attitude that surfaces when several departments or groups do not want to share information or knowledge with other individuals within the same company. A silo mentality can often spur corporate “data turf wars” that reduce efficiency and contribute to an imploding corporate culture. Call it vanity or a corporate power play, the silo mentality-attempting to satisfy the needs of a particular business area or function-often has little regard for the Big Picture-the important enterprise data management requirement. The lack of this all-encompassing high-level overview creates an environment where all core business entities, such as customer, product, vendor, assets, and so forth, scatter across multiple systems within the organization. This creates multiple views, triggering data quality issues, preventing organizations from building meaningful business intelligence and analytics’ systems to foster better decision making. In a nutshell, there is no Master Data Management (MDM).

Businesses today are using MDM to help create a single data view by centralizing all the core business entities, and their attributes, references, hierarchies, and so forth, into a master repository that propagates this data into required transactional and analytical systems across the organization. MDM provides a framework of process and technologies to create and maintain an authoritative, reliable, sustainable, accurate, and secure data environment that represents a “single version of truth”. An effective MDM strategy includes data governance processes and policies which assist in resolving organizational data definition and data representation conflicts to create, store, maintain, exchange, and synchronize a consistent, accurate, and timely “system of record” for core business entities. Policies and processes should be flexible enough to absorb the changing business rules in an agile manner.
Enterprises today are turning towards MDM to fix quality issues in their legacy systems and derive the best value from their corporate data.

Creating and maintaining accurate Master Data has become a business imperative that organizations have embarked upon to improve business process to create efficiencies, drive innovation, adhere to regulatory compliance, deal with mergers and acquisitions, and create analytics from their corporate data. To accomplish this grandeur, business and IT need to partner and establish governance frameworks, agree upon common definitions and business rules, identify best-fit technology frameworks and tools, and drive change management by building consensus across organizations’ functions and global divisions.

MDM Begins with a Comprehensive Roadmap that includes all Business Entities

An organization’s multi-domain MDM roadmap should be spread over multiple years to touch each and every business process, including IT systems. Because this can be implemented one master entity at a time, return on investment can be realized as each entity is implemented. Initial implementations might be difficult and stretch timelines as the organization experiences a learning curve to align technology and business processes designed to improve the way things are done. As maturity sets in, subsequent implementation phases can be fast tracked.

It is important that an organization select a partner who is not only well versed within the technology domain, but also in the functional domain. It would be a value-add if the partner had expertise in implementing MDM roadmaps. The chosen partner should share the vision of the business sponsor and be able to communicate this vision, articulating it across business units to garner their buy-in. The critical success factor for a program of this magnitude is driving change management. Any resistance to implementation from any business units can jeopardize the whole program.
Trianz MDM Service Offerings

Trianz offers complete suite of services for MDM Program that includes but not limited to core MDM services along with pre and post MDM services.

### Technologies and Platforms

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<th>MDM</th>
<th>Others</th>
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<tr>
<td>Informatica MDM</td>
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<td>IBM Infosphere MDM</td>
<td>IBM Data Stage, ODIEE</td>
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<td>Oracle MDM</td>
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<td>SAP MDM</td>
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<td>Informatica Data Quality,</td>
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### Industries

- BFSI
- Manufacturing
- Telecom
- Healthcare
- Hi-Tech
- Retail

### Customer Data

- Master Data Domains
- Reference Data
- Product Data
- Asset Data
- Producer / Vendor

### MDM Service Offerings

- MDM Maturity Assessment with respect to business processes and technologies related to MDM, Data Quality, Data Integration and Data Governance
- MDM Roadmap which includes Governance, Stewardship, Tools Selection, Development, Implementation and Sustenance
- Designing Architectural Framework to derive Golden Records
- Implement Complex Hierarchies and Relationships
- Develop custom UI for data governance, business process workflows, on-going master data management
- Implement Batch/Real-time/On-Demand data integration of master data with transactional systems & EDW
- Change Management across Business Units
- MDM Product Upgrades and Migrations
- Match and Merge Performance Improvement
- Support and Maintenance Services
  - Production support
  - Maintenance and Enhancements

### Trianz MDM Differentiators

The following are things Trianz does to set it apart from other MDM competitors:

- Works with Fortune 500 companies on several large multi-year engagements as well as small multi-domain MDM engagements
- Provides end-to-end services that includes both pre and post-MDM services
- Implements, successfully, one of the world’s largest customer data-integration implementations
- Develops customized solution accelerators, based on client unique requirements, that can be used across multiple projects
- Uses dedicated MDM COE to provide thought leadership on emerging trends, business problems, and solutions
- Builds solution accelerators to reduce project time lines and offer cost savings to clients
- Exhibits expertise in all areas of information management in the MDM ecosystem
- Champions change management in client organizations for smoother implementation of MDM projects
Trianz Proprietary Reference Architecture is a Key Ingredient of MDM

MDM occupies center stage in the organizational analytics and information management technology landscape. It plays a key role in sharing master data across organizational systems. A typical MDM implementation is complex and requires professionals with diverse technology skill sets, robust governance practices, and excellent project/program management skills.

Data Profiling

The following are two reasons why data profiling is important to MDM:
- Trianz data analysts profile data from various internal/external source systems and capture the requirements for consolidation.
- Profiling of data from various internal/external source systems and creating business rules and cleanses and augments the data for downstream systems consumption.

Data Enrichment

The following are three data enrichment actions to take for MDM:
- Develop business rules to check the accuracy and authenticity of the data
- Integrate with third party applications such as Address Doctor for information correction and enrichment
- Interact with DNB for company information (company name, address, legal hierarchies, rankings)
Creating Golden Records and the Best Version of Truth (BVT)

The following are two ways to create golden records and arrive at BVT:
- Define and implement effective, efficient match/merge strategies for de-duplication of data to create golden records
- Improve efficacy of existing match/merge rules and reduce manual intervention by data stewards to arrive at BVT

Hierarchy Management

The following are two things to do to ensure successful MDM:
- Create hierarchies of employees (reporting), customers (legal hierarchies), products
- Provide training to users on creating hierarchies on their own per business needs

Data Integration

The following are two important facts about data integration within MDM:
- Batch Integration: Integrate data is from source systems to MDM systems, and vice versa, using industry standard ETL/ETL tools
- Real-time Integration: This solution includes data replication using Change Data Capture (CDC) tools or Enterprise Application Integration (EAI) or Enterprise Integration Information (EII). The Trianz-On-Demand solution offers a SOA-based platform for consuming data from MDM hubs, using Web services.

Data Governance

The following are three things to accomplish in regards to effective data governance:
- Establish a data governance council and define roles and responsibilities for each member of the council
- Define data governance policies and standards for data definitions, data capture, review and approval, data publishing, and consuming
- Implement tools (custom and product specific UI, BPM for workflows) for data and on-going MDM

Trianz Solution Accelerators include the following:

### MDM Framework
- Domain specific data models
- Pre-defined cleansing, matching/merging rules
- Reference architectures for data integration (real-time, batch)
- Test strategies for testing across various layers and systems, match/merge rules, trust rules etc.
- Bench mark results for tool Selection
- Project Execution Framework
- Project Estimation Model
- Templates, Standards & Best Practices for requirements, design, development, testing and implementation.

### Data Integration Framework
- Framework for Auditing and Control mechanisms, which are very critical for enterprise data integration
- Framework for Error Handling to capture reject records.
- Code Review Tool for quick code verification and validation
- Migration Toolkit for migration from one version of the ETL Tool to the next version.
- Test strategies for data integration between various data sources (RDBMS, Flat Files. and so forth)

### Data Quality Framework, which provides...
- Comparison between different data types
- Custom SQL Support
- Dashboard
- Alerts and notifications
- EDW Deployment Management
- Administration
- Defect tracking tools integration
Trianz Center Of Excellence

Trianz has established a Center of Excellence (COE) to enrich its MDM capabilities, build solution accelerators, and optimize an existing MDM framework. Project delivery teams are guided by COE Practice Managers to address any technical hurdles encountered during the project. COE plays an active role in understanding a client’s existing projects as well as upcoming projects. The COE provide proactive thought leadership based on general Industry trends as well as by the experience gained by the COE’s proof-of-concept projects.

- More than 50 resources in MDM COE
- IBM, SAP, Oracle and Informatica Certified Products Specialists
- Solution Designers and Architects
- Subject Matter Experts
- Conduct Workshops & provide Technology & Mgmt Consulting

Customer Benefits

- Leverage COE’s Evaluation documentation for Quick selection of tools and technology
- Improves Productivity of the resources
- Faster Time To Market
- Reduces Cost of Implementation
- Enhances Quality of the project
- Ensures Robust, Reliable and Scalable Solutions
- Reduces Risks
- Enables Predictability in outcome of the projects
- Provides Business Case and ROI’s

- Informatica and IBM Labs
- Informatica and IBM Partnership
- Proof Of Concepts on Emerging Areas
- Reference Architectures
- Reusable Code Artifacts
- Business Case and ROI’s
- Product Evaluation and Benchmarking

- Best Practices, Standards and Guidelines
- Templates and Checklists
- Execution Frameworks and Methodologies
- Capacity Building
- Training

- Frameworks and Solution Accelerators
- 360 Degree Customer View Framework
- Whitepapers
- Technology Presentations
- Knowledge Management
### Case Studies

#### Customer Data Integration and 360 Degree View
**Fortune 100 Insurance Company**

- **Challenges**
  - Poor customer service and high customer attrition
  - Poor cross-selling and up-selling
  - Ineffective marketing campaigns

- **Solution**
  - Performed technology and process assessment, provided roadmap, and implemented MDM solution along with data integration and BI services

- **Benefits**
  - Boosted customer satisfaction up by six basis point
  - Improved customer retention
  - Created effective marketing campaigns and improved top/bottom lines

#### Reference Data Management
**Fortune 100 Insurance Company**

- **Challenges**
  - Inefficient business & IT processes
  - Unable to establish production support model due to disparate systems
  - System outages due to legacy systems

- **Solution**
  - Created reference data hub integrating data from several legacy systems
  - Developed custom UI for data maintenance and stewardship
  - Provided sound data governance policies and procedures, SOA based data consumption

- **Benefits**
  - Initiated centralized data governance and stewardship
  - Improved maintainability and effective production support model
  - Developed robust and highly scalable data platform

#### Employee Hierarchy
**Fortune 100 Insurance Company**

- **Challenges**
  - Multiple applications managing inconsistent employee information
  - Difficulty understanding employee hierarchies and deficiencies

- **Solution**
  - Provided data integration services to consolidate and cleanse data from multiple sources
  - Created hierarchies between employees
  - Provided UI for hierarchy management

- **Benefits**
  - Provided Effective processing and management of employee data across SBU's
  - Integrated set of high-quality employee data for smooth operations
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